UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,563	09/12/2000	Gregory L. Slaughter	5181-64900	6903

7590   05/04/2007

Robert C Kowert
Conley Rose & Tayon PC
P O Box 398
Austin, TX 78767-0398

EXAMINER
LESNIEWSKI, VICTOR D

ART UNIT	PAPER NUMBER
2152	

MAIL DATE	DELIVERY MODE
05/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED

MAY 0 4 2007

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/660,563
Filing Date: September 12, 2000
Appellant(s): SLAUGHTER ET AL.

Robert C. Kowert, Reg. No. 39255
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/8/2007 appealing from the Office action mailed

11/6/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: The ground of rejection listed by the appellant on page 9 of the brief as #2 should read "Claims 6, 16, and 26 are rejected under 35 U.S.C.

103(a) as being unpatentable over Beck in view of Roberts et al. (U.S. Patent Number

6,560,633)."

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| 6,604,140 | BECK ET AL. | 8-2003 |
| 6,560,633 | ROBERTS ET AL. | 5-2003 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-15, 17-25, and 27-30 are rejected under 35 U.S.C. 102(e) as being

anticipated by Beck et al. (U.S. Patent Number 6,604,140), hereinafter referred to as Beck.

Some claims will be discussed together. Those claims which are essentially the same

except that they set forth the claimed invention as a system or a computer-readable storage

medium are rejected under the same rationale applied to the described claim.

Beck has disclosed:

- <Claims 1, 11, and 21>

    A method comprising: a client reading an advertisement from a space, wherein the space

    comprises a network-addressable storage location (column 6, lines 1-16), wherein the

    advertisement comprises a Uniform Resource Identifier (URI) and a schema, wherein the

    URI specifies a network address at which a service may be accessed, and wherein the

    schema specifies one or more messages usable to invoke one or more functions of the

    service (column 4, lines 40-60); and the client sending a first message to the service at the

    URI, wherein the first message is specified in the schema (column 6, lines 30-39).

- <Claims 2, 12, and 22>

    The method of claim 1, further comprising: the service sending a second message to the

    client in response to the client sending the first message to the service, wherein the

    second message is specified in the schema (column 6, lines 41-44).

- <Claims 3, 13, and 23>

    The method of claim 1, further comprising: invoking one or more functions of the service

    in response to the client sending the first message to the service (column 6, lines 39-41).

- <Claims 4, 14, and 24>

    The method of claim 1, wherein the schema is expressed in a data representation

    language (column 5, lines 46-50).

- <Claims 5, 15, and 25>

  The method of claim 1, wherein the first message is expressed in a data representation

  language (column 5, lines 54-61 and column 6, lines 30-39).

- <Claims 7, 17, and 27>

  The method of claim 1, wherein the URI comprises an Internet address (column 4, lines

  50-51).

- <Claims 8, 18, and 28>

  The method of claim 1, further comprising: the service publishing the advertisement in

  the space (column 4, lines 31-39).

- <Claims 9, 19, and 29>

  The method of claim 1, further comprising: the client using a lookup service to find the

  advertisement in the space (column 5, lines 65-67).

- <Claims 10, 20, and 30>

  The method of claim 1, further comprising: the client using the URI and the schema in

  the advertisement to construct a gate for access to the service (column 7, lines 34-44).

Since all the limitations of the invention as set forth in claims 1-5, 7-15, 17-25, and 27-30 were

disclosed by Beck, claims 1-5, 7-15, 17-25, and 27-30 are rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 16, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck in view of Roberts et al. (U.S. Patent Number 6,560,633). Pursuant to the applicant's previous request for documentary evidence and MPEP 2144.03, the use of Official Notice was previously supported by and is herein supported by Roberts et al. (U.S. Patent Number 6,560,633), hereinafter referred to as Roberts, and thus the rejection has been previously and is now maintained.

Beck disclosed a service framework for computing devices that allows devices to discover, advertise, and use services on a network. In an analogous art, Roberts disclosed a method for creating and invoking web services on a network.

Concerning claims 6, 16, and 26, Beck did not explicitly state a data representation language that comprises XML. However, Roberts does explicitly disclose this feature as his system is focused on generating and utilizing XML documents in order to implement web services on a network. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Beck by adding the ability to use a data representation language that comprises XML as provided by Roberts. Here the combination satisfies the need for a more efficient approach to service discovery that uses more efficient methods of describing and loading services. See Beck, column 1, lines 37-43.

Thereby, the combination of Beck and Roberts discloses:

- \<Claims 6, 16, and 26\>

The method of claim 5, wherein the data representation language comprises extensible Markup Language (XML) (Roberts, column 4, line 50 through column 5, line 7).

Since the combination of Beck and Roberts discloses all of the above limitations, claims 6, 16,

and 26 are rejected.

(10) Response to Argument

In the brief, the appellant has argued:

- <Argument 1>

Beck does not disclose all of the features of claim 1 and like claims because he does not

disclose "a client reading an advertisement from a space" as recited in the claims.

Argument 1 is discussed under the appellant's stated first ground of rejection and

concerns claim 1 and like claims. See pages 10-12 of the brief. In response to argument 1, it is

maintained that Beck does disclose a client reading an advertisement from a space. The rejection

clearly sets forth Beck's service descriptor as an advertisement read from a space (previously

cited column 6, lines 1-16). In Beck's system, the client requests a service by querying a service

registry in order to match a certain service descriptor. The client reads a matched service

descriptor in order to ascertain whether the service needs to be loaded and also in order to

download the service functionality. This clearly meets the limitation of reading an advertisement

from a space. Furthermore, in an alternate embodiment, Beck discusses discovery of services

and teaches "To discover services, the service user needs to receive service descriptors

multicasted over the ad-hoc network by other devices." This would also satisfy the limitation of

reading an advertisement from a space. Beck goes on to state that "discovering a service

involves loading only a service descriptor, not loading the code that implements the service."

See column 4, line 61 through column 5, line 37. The appellant's discussion of the service

adapter in support of argument 1 is irrelevant as it can be seen that Beck's client reads an

advertisement from a space before downloading of the service interface, adapter, and

implementation. The client reads the service descriptor in order to determine whether this

service functionality should be downloaded as discussed above.

Concerning the appellant's remarks that "the Examiner also asserts that Beck's teachings

regarding a service user receiving service descriptors multicast over the ad-hoc network by other

device, without citing any particular portion of Beck," it is noted that this portion of Beck was

previously clearly cited. See again the citation to column 4, line 61 through column 5, line 37 as

cited in the previous paragraph and as cited in paragraph 17 of the final action dated 11/6/2006.

Concerning the appellant's remarks that "Beck teaches that it is the service user, not a

client, that listens for and receives broadcast service descriptors," it is noted that Beck clearly

states that the role of a service user is to host one or more clients that use one or more services on

the device. See again column 4, line 61 through column 5, line 37. This relates directly to the

claim language as clients request usage of services by querying the service registry which, in

turn, matches the request against descriptors. Again see column 6, lines 1-16.

The appellant goes on to state that "Beck does not teach that a client reads an

advertisement from a space before receiving a service adaptor," but then immediately contradicts

himself by stating "Beck's client supplies a service description of a requested service and that the

registry finds a matching service to load...The client is then returned a reference to the service

adaptor." This in fact meets the limitation at hand as the reference to the service adaptor is in

fact a network address at which the service may be accessed. Although the client is returned a

reference to the service adaptor and not the descriptor itself, the descriptor (advertisement) has

been read as it has been used to match a service to the request and return a reference to that

service. Nowhere do the claims state that the advertisement is downloaded to a client. Claim 1

states only "a client reading an advertisement from a space."

- <Argument 2>

    Beck does not disclose all of the features of claim 1 and like claims because he does not

    disclose "wherein the advertisement comprises a schema, wherein the schema specifies

    one or more messages" as recited in the claims.

    Argument 2 is discussed under the appellant's stated first ground of rejection and

concerns claim 1 and like claims. See pages 12-14 of the brief. In response to argument 2, it is

maintained that Beck does disclose an advertisement comprising a schema, wherein the schema

specifies one or more messages. The rejection clearly sets forth an enhanced service descriptor

that contains information about the service, including the service name, a description, and a

location of code (previously cited column 4, lines 40-60). In Beck's system, the client requests a

service by querying a service registry in order to match a certain service descriptor. The client

uses a matched service descriptor to download the service functionality. This download includes

the service interface, the service adapter, and the service implementation which clearly effectuate

the functions of the service. This clearly meets the limitation of an advertisement comprising a

schema, wherein the schema specifies one or more messages usable to invoke one or more

functions of the service. The service descriptor clearly includes code to allow data transfer

between the client and service which effectuates download of service functionalities and thus is

"usable to invoke one or more functions of the service". See previously cited column 6, lines 1-

16. As the appellant states in support of the argument, "Beck describes a Java interface for the

service that 'defines the set of operations that the service can perform on behalf of a client.'"

Again, as the reading of a service descriptor leads to the downloading of this interface, the

service descriptor contains code for data transfer that is "usable to invoke one or more functions

of the service."

Concerning the appellant's remarks that "The Examiner is ignoring the specific

requirements of Applicants' claim," it is noted that the appellant has not pointed out what

limitations it is felt are being ignored. The appellant continues by pointing out that "Beck's Java

Interface is clearly separate code and not part of the service descriptor," however, as discussed

above, the service descriptor clearly includes code to allow data transfer between the client and

service. This code is in fact a specification of messages that are used to download and run

service functionalities (such as the Java interface). This downloading and running means that the

messages have been used "to invoke one or more functions of the service."

Further, it is noted that a schema is simply a data model. In the case of the claims, it is

data that "specifies one or more messages." Beck's service descriptor, which includes code to

allow the client and service to communicate (i.e. specifying messages), clearly meets the

limitation at hand as the schema is not further defined in the claims so as to include any

additional functionality. It is further noted that the claims state that the messages are what is

"usable to invoke one or more functions of the service." Again, the communication between the

client and service results in the downloading and running of the service interface, the service

adapter, the service implementation, etc.

- <Argument 3>

  Beck does not disclose all of the features of claims 4, 5, and like claims because he does

  not disclose a schema or a message "expressed in a data representation language" as

  recited in the claims.

Argument 3 is discussed under the appellant's stated first ground of rejection and

concerns claims 4, 5, and like claims. See pages 14-17 of the brief. In response to argument 3, it

is maintained that Beck does disclose a schema and a message expressed in a data representation

language. The rejection clearly sets forth Beck's use of a Java interface and Java classes

(previously cited column 5, lines 46-61). The appellant has argued that "a Java interface is not a

schema expressed in a data representation language," but has failed to provide any basis for this

conjecture. In fact, Java does satisfy the limitation of a data representation language in the

claims. A data representation language is not further defined or explained in the claims so as to

be distinguished over the Java programming language. Java abstracts the data on bytecodes so

that when applications are developed the same code may run in different environments. Java

utilizes such tools as Java classes and JAR files (which include metadata) for the purpose of data

representation. As the appellant states, "Beck also teaches that the service interface and the

service implementation are Java-based and that the RMI, OSF-RPC and IIOP inter-process

communication protocols are used." Again, the use of Java-based schema and messages meet the limitations in question.

Further, it is contended that the appellant is reading limitations into the claims that are not present as a data representation language is not further defined or explained in the claims. The appellant argues that "a data representation language is a particular type of language used to describe or represent data or content." Here it is noted that the Java language meets this definition.

- <Argument 4>

  Beck does not disclose all of the features of claim 10 and like claims because he does not disclose "the client using the URI and the schema in the advertisement to construct a gate for access to the service" as recited in the claims.

Argument 4 is discussed under the appellant's stated first ground of rejection and concerns claim 10 and like claims. See pages 17-18 of the brief. In response to argument 4, it is maintained that Beck does disclose the client using the URI and the schema in the advertisement to construct a gate for access to the service. The rejection clearly sets forth Beck's construction of a gate for access to the service as it cites the use of the service implementation at either side or both sides of the data transfer (previously cited column 7, lines 34-44). As discussed above, in Beck's system, the client requests a service by querying a service registry in order to match a certain service descriptor. The client uses a matched service descriptor to download the service functionality. This download includes the service interface, the service adapter, and the service

implementation which clearly effectuate the functions of the service. See previously cited

column 6, lines 1-16. This clearly meets the limitation of using the advertisement to construct a

gate for access to the service. Also, it is again noted that an enhanced service descriptor contains

a URL that is used to access the service. See previously cited column 4, lines 40-60.

Further, it is contended that the appellant is reading limitations into the claims that are not

present as constructing a gate is not further defined or explained in the claims except that it leads

to accessing the service. Thus, it is maintained that Beck's use of the service implementation at

either side or both sides of the data transfer meets the limitation of constructing a gate as it

results in accessing the service as described above.

- <Argument 5>

  The combination of Beck and Roberts does not disclose all of the features of claim 6 and

  like claims because it does not disclose "wherein the data representation language

  comprises eXtensible Markup Language (XML)" as recited in the claims.

Argument 5 is discussed under the appellant's stated second ground of rejection and

concerns claim 6 and like claims. See pages 18-20 of the brief. In response to argument 5, it is

maintained that the combination of Beck and Roberts does disclose the data representation

language comprising XML. Roberts clearly teaches the use of XML in the context of expressing

messages sent to invoke a service. Thus the combination of Beck and Roberts teaches the

limitation in question as discussed in the rejection in section (9) above. Concerning the

appellant's statements about motivation to combine the references, it is maintained that the stated

motivation in the above rejection is sufficient. See the paragraphs discussing the combination of Beck and Roberts in the rejection in section (9) above. Furthermore, the appellant has stated that "To modify Beck to use XML messages would be counter to the intended operation of Beck to employ a specific Java interface." However, this is incorrect. Beck specifically offers language independence in his system to allow the data transfer and other possible service implementations to be written in any programming language. See Beck, column 6, lines 63-65.

Here it is noted that the appellant has made no mention of the teachings of Roberts as cited in the rejection. The appellant is reminded that the rejection is based on the combination of Beck and Roberts, both of which are directed toward expressing messages sent to invoke services. The appellant is reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. The appellant is again directed to the discussion of the combination in the rejection above.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.
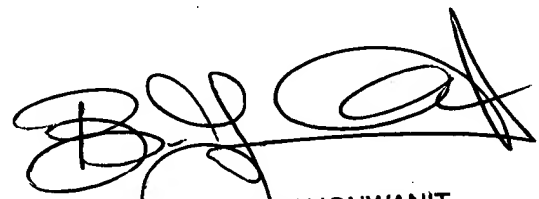
Respectfully submitted,

[signature]

Victor Lesniewski
Patent Examiner
Group Art Unit 2152

Dated: April 14, 2007

Conferees:

[signature]
Lynne H. Browne
Appeal Specialist, TQAS
Technology Center 2100

[signature]
BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER